IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mika Gomi et al.

Filed: May 20, 1998

Title: "LIQUID CRYSTAL DISPLAY DEVICE"

Docket No.: 30821US2

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents Washington D.C. 20231

Sir/Madam:

Please amend the application submitted herewith as follows before the examination thereof.

IN THE CLAIMS:

Please delete claims 1-11.

Please add new claims 12-23 as follows:

- 1 12. (new) A liquid crystal display device
- 2 comprising:
- 3 a liquid crystal panel comprising liquid crystal
- 4 cells, a first plate disposed on a displaying side of the
- 5 cells, and a second plate disposed on a reverse side of
- 6 the cells;
- 7 a liquid crystal driver electrically connected with

- 8 the liquid crystal panel through a circuit pattern; and
- 9 a light shielding material disposed adjacent said
- 10 liquid crystal driver so as to prevent an outer light
- 11 from being incident to said liquid crystal driver,
- 12 wherein
- said liquid crystal driver is mounted on the liquid
- 14 crystal panel by a light shielding resin disposed on said
- 15 liquid crystal panel so as to cover one end of a film
- 16 carrier and a side surface of said liquid crystal driver.
- 1 13. (new) The liquid crystal display device
- 2 according to claim 12, wherein one end of said liquid
- 3 crystal panel is located on the film carrier and said end
- 4 is covered with a light shielding film extending from
- 5 said liquid crystal panel to said film carrier.
- 1 14. (new) The liquid crystal display device
- 2 according to the claim 12,
- 3 wherein said first plate has a reverse side facing
- 4 the liquid crystal cells and an opposite displaying side
- 5 said liquid crystal driver is mounted on the reverse side
- 6 of the first plate, and
- 7 said light shielding material comprises a light
- 8 shielding film affixed to the displaying side of said
- 9 first plate so as to cover an area which is opposite to a
- 10 mounting position of said liquid crystal driver.

- 1 15. (new) The liquid crystal display device
- 2 according to the claim 12,
- 3 wherein said second plate has a displaying side
- 4 facing the liquid crystal cells and an opposite reverse
- 5 side and said liquid crystal driver is mounted on the
- 6 display side of the second plate, and
- 7 said light shielding material comprised a light
- 8 shielding film affixed to the reverse side of the second
- 9 plate.
- 1 16. (new) The liquid crystal display device
- 2 according to the claim 12,
- 3 wherein said circuit pattern is formed on a film
- 4 carrier;
- 5 said liquid crystal driver is mounted on the film
- 6 carrier and disposed under the second plated; and
- 7 said light shielding material comprises a light
- 8 shielding film affixed on a surface of said liquid
- 9 crystal driver facing the second plate.
- 1 17. (new) The liquid crystal display device
- 2 according to the claim 16,
- 3 wherein said liquid crystal driver is mounted on a
- 4 surface of said film carrier facing the second plate;
- 5 and a surface of said liquid crystal driver opposite

- 6 the second plate is covered with light shielding resin.
- 1 18. (new) The liquid crystal display device
- 2 according to the claim 16,
- 3 wherein said liquid crystal driver is mounted on a
- 4 surface of said film carrier opposite the second plate;
- 5 and a surface of said liquid crystal driver facing
- 6 the second plate is covered with light shielding resin.
- 1 19. (new) The liquid crystal display device
- 2 according to the claim 12,
- 3 wherein the device is further mounted in a portable
- 4 telephone terminal.
- 1 20. (amended) The liquid crystal display device
- 2 according to the claim 12, further comprising a diffusion
- 3 sheet located adjacent said liquid crystal display panel,
- 4 wherein said diffusion sheet is composed of a light
- 5 diffusing area and a light absorbing area located on the
- 6 outer periphery thereof, the light diffusing area serving
- 7 to diffuse illumination light from a light source to the
- 8 liquid crystal display panel, and the light absorbing
- 9 area serving to absorb the extraneous light incident on
- 10 said liquid crystal driver.
- 1 21. (new) The liquid crystal display device

- 2 according to the claim 12, wherein the first plate has a
- 3 first transparent electrode, the second plate has a
- 4 second transparent electrode, and the liquid crystal
- 5 cells are carried between the first and second
- 6 transparent electrodes and;
- 7 the device further comprises a light shielding resin
- 8 covering an exposed area of the first transparent
- 9 electrode from the liquid crystal cells so that the light
- 10 which reflects from said diffusion sheet to reach the
- 11 liquid crystal is shielded.
- 1 22. (new) The liquid crystal display device
- 2 according to the claim 21, wherein said light shielding
- 3 resin and said light absorbing area of said diffusion
- 4 sheet are colored in black.
- 1 23. (new) The liquid crystal display device
- 2 according to the claim 21, wherein said light shielding
- 3 resin is colored black.

If there are any additional fees required by the foregoing Amendment, please charge the same to our Deposit Account No. 16-0820, our Order No. 30821.

Respectfully submitted, PEARNE & GORDON LLP

Aaron A. Fishman, Reg. No. 44682

526 Superior Avenue East Suite 1200 Cleveland, Ohio 44114 (216) 579-1700

June 7, 2001